

MINIMUM CRITERIA DETERMINATION CHECKLIST

TIP Project No.: BR-0047

State Project No.: 67047.1.1

Project Location: Bridge No. 10 on SR 1105 over US 52 in Stokes County

Project Description: The North Carolina Department of Transportation (NCDOT) proposes to replace Bridge No. 10 on Meadowbrook Drive (SR 1105) over US 52 in the City of King, Stokes County (refer to Figure 1). The purpose of the project is to replace a structurally deficient bridge.

Constructed in 1960, Bridge No. 10 is a four-span structural steel bridge that is 266 feet long with a clear roadway width of 24 feet. The existing structure carries 4,050 vehicles per day (2019 ADT), which is anticipated to increase to 4,400 vehicles by 2040. NCDOT Structure Management Unit records and the National Bridge Inventory indicate that Bridge No. 10 has a superstructure condition rating of 4 (poor) out of 9 and a sufficiency rating of 46.45 out of 100. This structure has been identified as a high priority bridge replacement due to sub-standard deck geometry and structural deficiencies.

Bridge No. 10 will be replaced in place with an off-site detour (refer to Figure 1). The proposed two-span steel plate girder structure will be approximately 210 feet long. The proposed bridge typical section is comprised of two eastbound lanes (including a left turn lane to access Kingsway Drive) and one westbound lane, with a minimum clear roadway width of 46 feet. A 5-foot, 6-inch sidewalk will be located adjacent to the eastbound travel lane (south side). Although the proposed structure will be approximately three feet higher to meet current design requirements, the use of retaining walls will allow for the future bridge to be shortened by approximately 56 feet. The project length is approximately 1,600 feet. The proposed design speed is 50 mph. Preliminary plans are included in Appendix A. The proposed project, BR-0047, is state-funded with an estimated construction cost of \$6.4 Million.

Anticipated Permit or Consultation Requirements: No permits required.

Special Project Information:

Environmental Commitments - The list of project commitments (green sheet) is included at the end of the checklist.

Design Exceptions - There are no anticipated design exceptions for this project.

Alternatives Evaluation-

- **No Build** - The No-Build Alternative would not eliminate the structural deficiencies of the existing bridge, and thus is not a viable option.
- **Build Alternatives** - The following Build Alternatives were considered:
 1. *Rehabilitation* - The bridge was constructed in 1960. Temporary repairs have previously been made to keep the bridge open. With a superstructure condition rating of 4 and sufficiency rating of 46.45, this structure has been identified as a high priority bridge replacement and further rehabilitation alternatives are not considered prudent.
 2. *Off-site Detour (Preferred Alternative)* - An approximately 4.5-mile off-site detour utilizing S. Main Street (SR 1611) and Newsome Road (SR 1222) was evaluated and determined to be acceptable. This alternative is preferred as it minimizes construction time and overall project cost.
 3. *On-site Detour* - An on-site detour would require construction of a temporary detour bridge, resulting in a longer construction schedule and increased construction costs. Since an acceptable off-site detour was available, an on-site detour was not evaluated.
 4. *Staged Construction* - Staged construction was not evaluated due to the availability of an acceptable off-site detour.
 5. *New Alignment* - Two new alignment alternatives were considered, north and south of the existing structure. The northern alignment would impact a multi-family housing unit at the intersection of Kingsway and Meadowbrook Drives, east of Bridge No. 10 and would decrease the line of sight at Kingsway Drive. The southern alignment would result in greater utility impacts at the intersection of Meadowbrook and Ingram Drives and would require relocation of a waterline. The two New Alignment alternatives were dropped from further study as they both would have a higher overall project cost and could result in potential relocations (northern) and greater utility impacts (southern).

Relocations - The two mobile homes located within proposed new right of way on Parcel 3 are abandoned (refer to Appendix A, Sheet No. 4). Therefore, no relocations would result from the proposed project.

Pedestrian and Bicycle Accommodations - NCDOT Division of Bicycle and Pedestrian Transportation (DBPT) recommended that the replacement bridge and approaches include 4-foot shoulders (minimum), as well as a 42-inch high railing on the bridge. The Winston-Salem Metropolitan Planning Organization Comprehensive Transportation Plan (CTP) identifies the bridge location as "Needs Improvement" concerning bicycle accommodations. As shown in Appendix A, the proposed roadway approaches include 4-foot paved shoulders (refer to Sheet No. 2A-1) and the replacement bridge will include

a 5-foot, 6-inch sidewalk and 54-inch high (4-foot, 6-inch), two-bar metal railings (refer to Sheet No. S-2).

Detour - Traffic would be managed with an off-site detour. The detour would follow Meadowbrook Drive (SR 1105) east to S. Main Street, south/southwest to Newsome Road and north/northwest to Meadowbrook Drive, for a distance of approximately 4.6 miles.

Threatened & Endangered Species - The biological conclusion for the Northern long-eared bat (NLEB) is unresolved. No potential NLEB habitat or evidence of bats were observed by NCDOT biologists during a site visit on May 30, 2018. The USACE has developed a Standard Local Operating Procedure for Endangered Species (SLOPES) to address NLEB when they are the lead agency, which NCDOT will follow for this project. This procedure applies to projects in Divisions 9-14. The requirements of the SLOPES for NLEB will be completed prior to Let and will be submitted to the USACE.

Cultural Resources - NCDOT's Archaeology Group reviewed the project under a programmatic agreement with the State Historic Preservation Office and determined that a reconnaissance investigation of the proposed Area of Potential Effects (APE) should be undertaken to record existing resources and to assess the potential for subsurface archaeological deposits. No artifacts or cultural features were observed within the APE during the requested survey and all shovel tests were negative. Neither of the two cemeteries located within the APE would be impacted by the proposed project. No additional work is recommended and the NCDOT Archaeology Group has concluded that there are no National Register listed or eligible archaeological sites present within the APE (refer to Appendix B). In addition, based on the historic architecture and landscapes review, there are no National Register listed or eligible properties and no survey was required (refer to Appendix B).

Agency Comments - NCDOT sought input from resource and regulatory agencies via a Start of Study scoping letter emailed on July 30, 2018. Letters were sent to the following agencies (responding agencies are denoted by an asterisk [*]):

- Federal Highway Administration*
- US Army Corps of Engineers*
- US Fish and Wildlife Service*
- NC Department of Environmental Quality
- NC Department of Parks and Recreation*
- NC State Historic Preservation Office*
- NC Wildlife Resources Commission
- NCDOT-DBPT*

Of the responses received, USFWS indicated that Schweinitz's sunflower may occur in the project area. Schweinitz's sunflower surveys were conducted for this project on August 15, 2018. In addition, the NCDOT-DBPT recommended that a minimum of 4-foot shoulders and 42-inch rail height be included in the design of the replacement bridge. As indicated previously, the proposed improvements include 4-foot paved

shoulders on the roadway approaches, and a 5-foot, 6-inch sidewalk and 54-inch high, two-bar metal railings on the replacement bridge.

Input forms were sent to the City of King Fire Chief/EM Coordinator, Stokes County EMS Director, Stokes County Sheriff, Stokes County Planning and Inspections Director, Winston-Salem Urban Area MPO Principal Planner, City of King Planning and Inspections Director, and Stokes County Schools Transportation Director. The City of King Fire Chief indicated that the bridge closure would have a high impact on response time reduction. However, following additional coordination between NCDOT District 9 staff and the Fire Chief, he is agreeable to the proposed use of an off-site detour.

Public Involvement - A project newsletter was mailed on May 31, 2019, to 268 property owners within the project area and along the proposed off-site detour route. To date, no comments have been received.

PART A: MINIMUM CRITERIA

| | YES | NO |
|--|-------------------------------------|--------------------------|
| 1. Is the proposed project listed as a type and class of activity allowed under the Minimum Criteria Rule in which environmental documentation is <u>not</u> required? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

If the answer to number 1 is “no”, then the project does not qualify as a minimum criteria project. A state environmental assessment is required.

If yes, under which category? **Category #9** – Reconstruction of existing crossroad or railroad separations and existing stream crossings, included but not limited to pipes, culverts, and bridges.

If either category #8, #12(i) or #15 is used complete Part D of this checklist.

PART B: MINIMUM CRITERIA EXCEPTIONS

| | YES | NO |
|---|--------------------------|-------------------------------------|
| 2. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse air quality impacts? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3. Will the proposed activity have secondary impacts or cumulative impacts that may result in a significant adverse impact to human health or the environment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4. Is the proposed activity of such an unusual nature or does the proposed activity have such widespread implications, that an uncommon concern for its environmental effects has been expressed to the Department? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

- 5. Does the proposed activity have a significant adverse effect on wetlands; surface waters such as rivers, streams, and estuaries; parklands; prime or unique agricultural lands; or areas of recognized scenic, recreational, archaeological, or historical value?
- 6. Will the proposed activity endanger the existence of a species on the Department of Interior's threatened and endangered species list?
- 7. Could the proposed activity cause significant changes in land use concentrations that would be expected to create adverse water quality or ground water impacts?
- 8. Is the proposed activity expected to have a significant adverse effect on long-term recreational benefits or shellfish, finfish, wildlife, or their natural habitats?

PART C: COMPLIANCE WITH STATE AND FEDERAL REGULATIONS

- | | YES | NO |
|--|-------------------------------------|-------------------------------------|
| 9. Is a federally protected threatened or endangered species, or its habitat, likely to be impacted by the proposed action? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 10. Does the action require the placement of temporary or permanent fill in waters of the United States? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 11. Does the project require the placement of a significant amount of fill in high quality or relatively rare wetland ecosystems, such as mountain bogs or pine savannahs? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 12. Is the proposed action located in an Area of Environmental Concern, as defined in the coastal Area Management Act? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 13. Does the project require stream relocation or channel changes? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Cultural Resources

- 14. Will the project have an “effect” on a property or site listed on the National Register of Historic Places?
- 15. Will the proposed action require acquisition of additional right of way from publicly owned parkland or recreational areas?

Response to Question 9 - Habitat for Schweinitz's sunflower is found within the study area along portions of the maintained communities and the edges of Basic Mesic Forest. A plant survey was conducted of all potential habitat in the study area on August 15, 2018, and no specimens of any sunflower were observed. A review of NHP records on August 16, 2018 indicated no known occurrences within 1.0 mile of the study area. The biological conclusion for this species is No Effect.

PART D:(To be completed when either category #8, 12(i) or #15 of the rules are used.)

- 16. Project length: _____
- 17. Right of Way width: _____
- 18. Project completion date: _____
- 19. Total acres of newly disturbed ground surface: _____
- 20. Total acres of wetland impacts: _____
- 21. Total linear feet of stream impacts: _____
- 22. Project purpose: _____

Prepared by: DocuSigned by:
Laura M. Stevens Date: 8/29/2019
2ECB27C304754C4...
Laura Stevens, AICP
Parrish and Partners, LLC

Approved by: DocuSigned by:
Kevin Fischer Date: 8/30/2019
ED19A18D88EC496...
Kevin Fischer, PE
Structures Management Unit
North Carolina Department of Transportation

PROJECT COMMITMENTS

Stokes County

Replace Bridge No. 10 on Meadowbrook Drive (SR 1105) over U.S. 52

WBS No. 67047.1.1

Project No. BR-0047

NCDOT Division 9, NCDOT Structures Management Unit (SMU)

Continued Coordination and Outreach

- In order to have time to adequately reroute school buses, the Division Project Manager will contact the Stokes County Schools Transportation Director (336-591-7169) at least one month prior to road closure.
- The Division Project Manager will coordinate with emergency management officials (City of King Fire Department Chief/EM Coordinator [336-983-3030], Stokes County EMS [336-593-5409], Stokes County Sheriff's Office [336-593-8787]) to discuss detour planning for emergency vehicles.

NCDOT Environmental Analysis Unit

Northern-Long Eared Bat (NLEB)

- The USACE has developed a Standard Local Operations Procedure for Endangered Species (SLOPES) to address NLEB when they are the lead agency, which NCDOT will follow for this project. This procedure applies to projects in Divisions 9-14. The requirements of the SLOPES for the NLEB will be completed prior to Let and will be submitted to the USACE. A Biological Conclusion is not required.

APPENDIX A

Preliminary Design

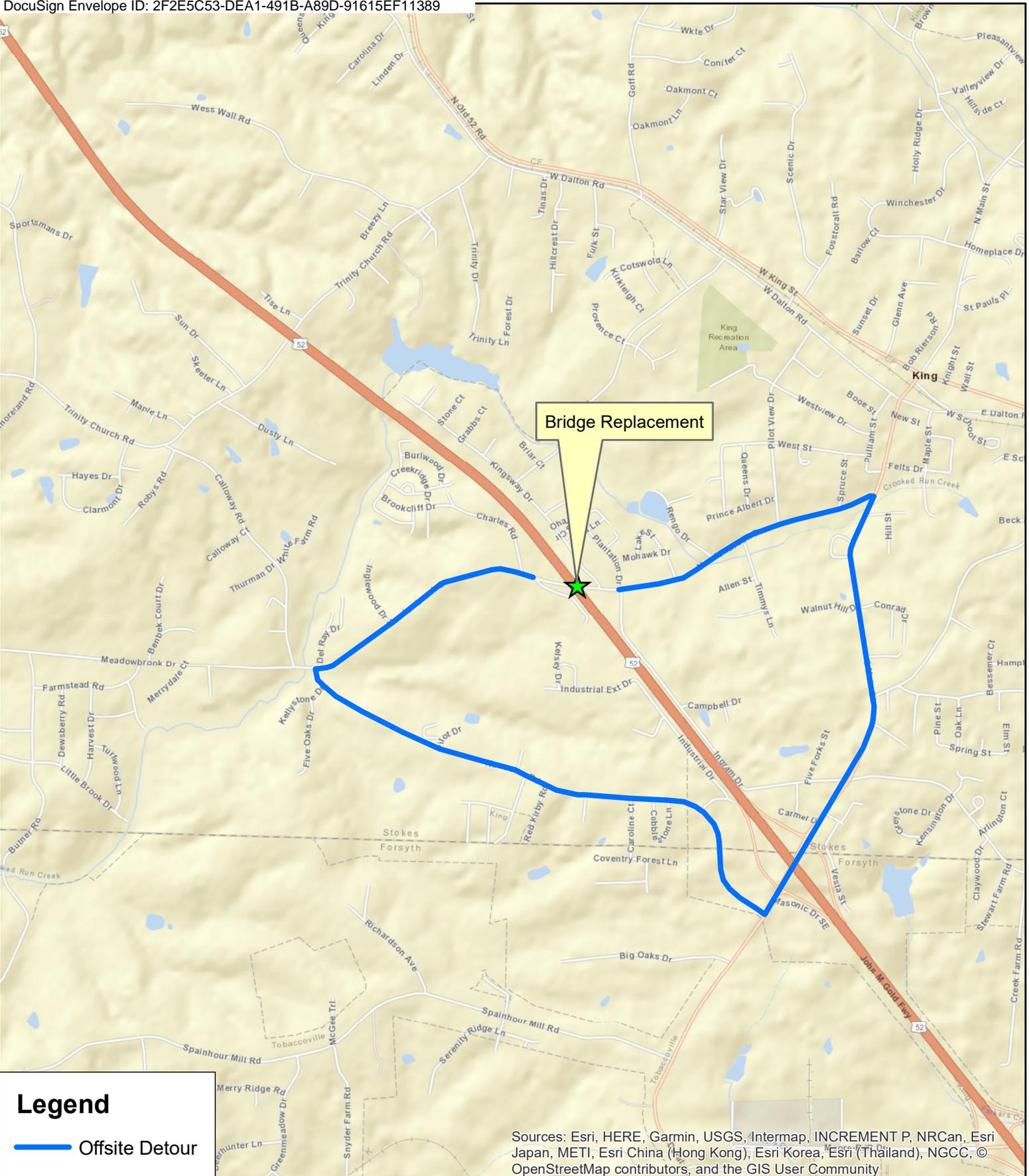


FIGURE 1

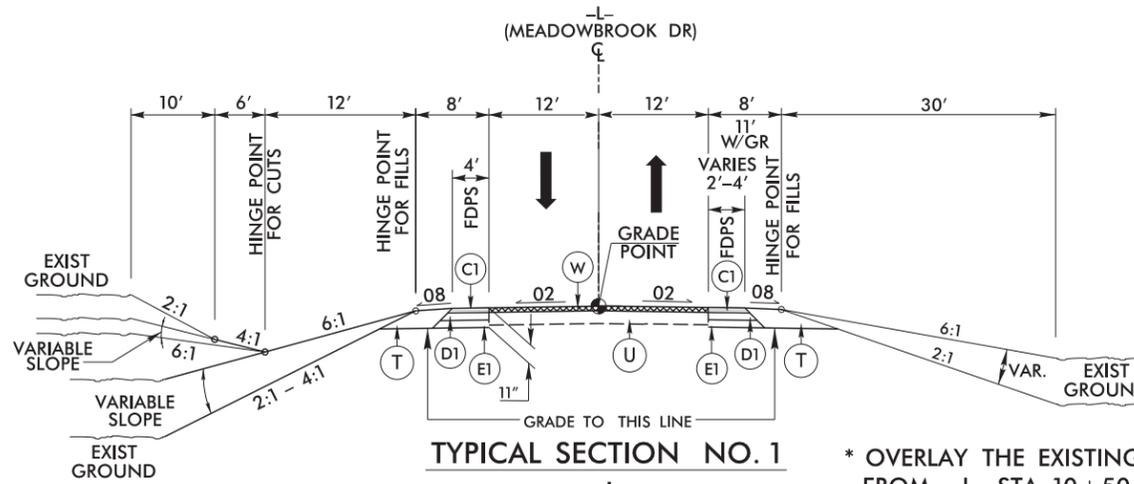
Vicinity Map
BR-0047, Replace Bridge 10 on SR 1105 over US 52
Stokes County, North Carolina



0 1,000 2,000 4,000
Feet

PAVEMENT SCHEDULE

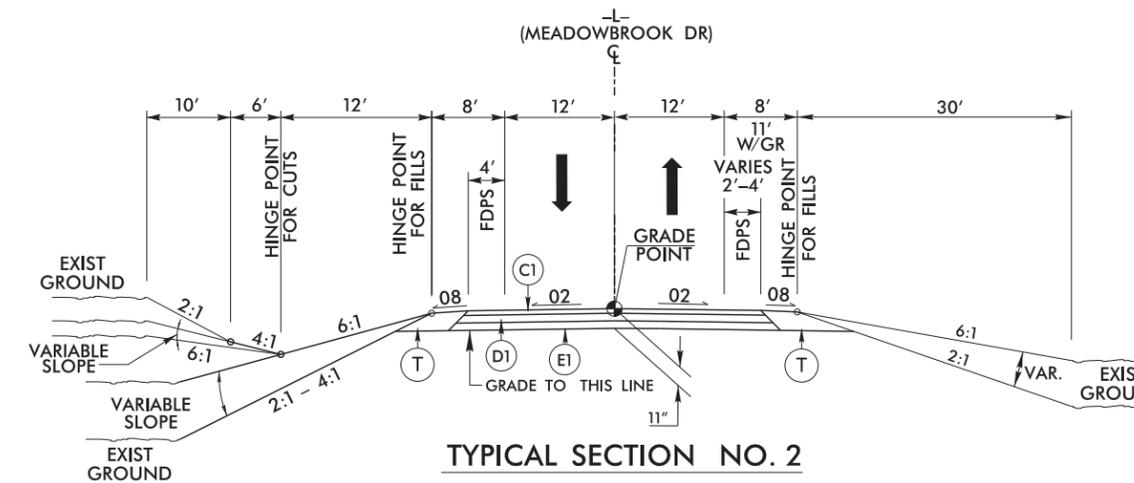
| | |
|----|---|
| C1 | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 165 LBS. PER SQ. YD. IN EACH OF THE TWO LAYERS. |
| C2 | PROP. APPROX. 1.5" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. |
| C3 | PROP. APPROX. 3" ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5C, AT AN AVERAGE RATE OF 168 LBS. PER SQ. YD. IN EACH OF THE TWO LAYERS. |
| C4 | PROP. VAR. DEPTH ASPHALT CONCRETE SURFACE COURSE, TYPE S9.5B, AT AN AVERAGE RATE OF 110 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 1.5" OR GREATER THAN 2" IN DEPTH. |
| D1 | PROP. APPROX. 4" ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. |
| D2 | PROP. VAR. DEPTH ASPHALT CONCRETE INTERMEDIATE COURSE, TYPE I19.0C, AT AN AVERAGE RATE OF 114 LBS. PER SQ. YD. PER 1" DEPTH. TO BE PLACED IN LAYERS NOT LESS THAN 3" OR GREATER THAN 4" IN DEPTH. |
| E1 | PROP. APPROX. 4" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 456 LBS. PER SQ. YD. |
| E2 | PROP. APPROX. 7" ASPHALT CONCRETE BASE COURSE, TYPE B25.0C, AT AN AVERAGE RATE OF 399 LBS. PER SQ. YD IN EACH OF THE TWO LAYERS. |
| R1 | EARTH MATERIAL. |
| R2 | EARTH MATERIAL. |
| T | EARTH MATERIAL. |
| U | EXISTING PAVEMENT. |
| W | VARIABLE DEPTH ASPHALT PAVEMENT (SEE WEDGING DETAIL) |



TYPICAL SECTION NO. 1

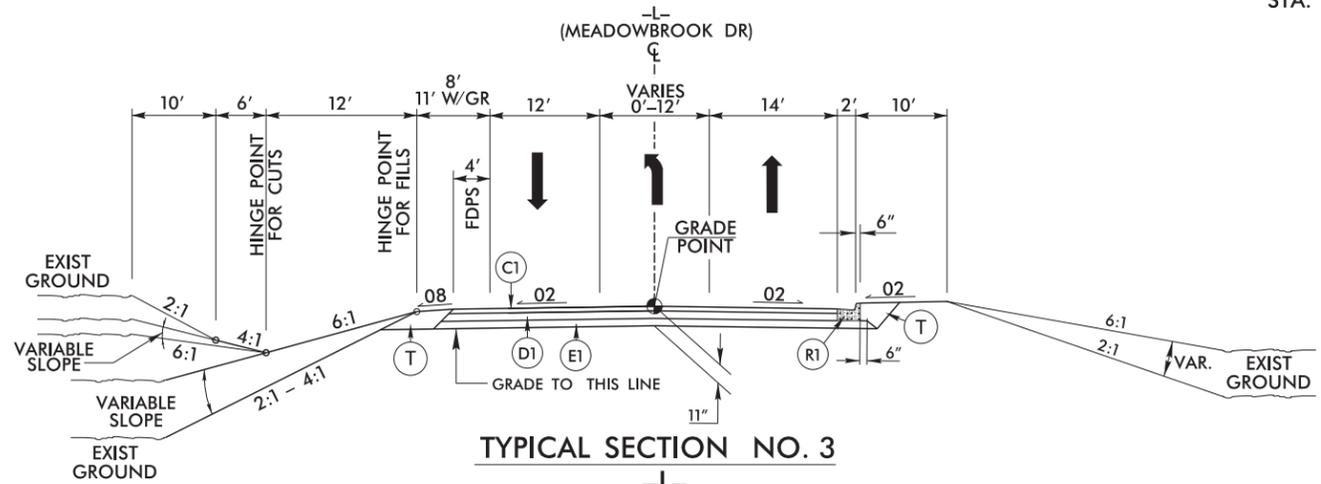
-L- STA. 10+50.00 - 14+00.00

* OVERLAY THE EXISTING PAVEMENT FROM -L- STA. 10+50.00 TO 12+00.00 AND SEE DETAIL 1.



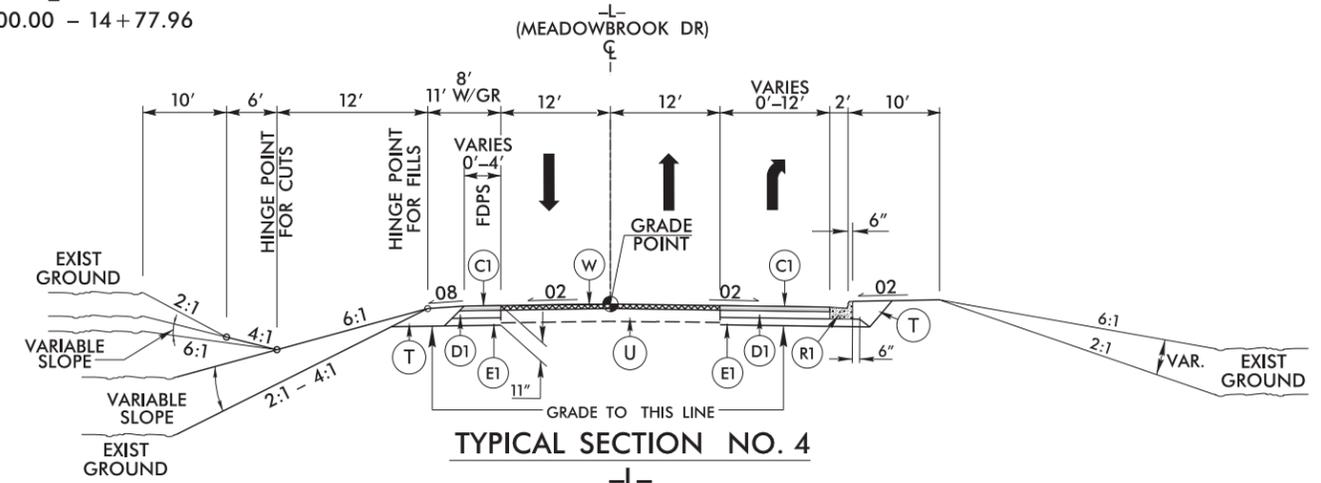
TYPICAL SECTION NO. 2

-L- STA. 14+00.00 - 14+77.96



TYPICAL SECTION NO. 3

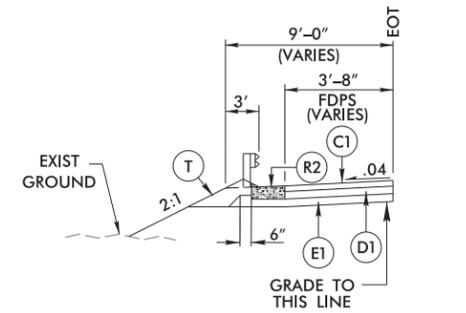
-L- STA. 14+77.96 - 17+21.73
STA. 19+34.23 - 24+00.00



TYPICAL SECTION NO. 4

-L- STA. 24+00.00 - 26+30.00

* OVERLAY THE EXISTING PAVEMENT FROM -L- STA. 25+00.00 TO 26+30.00 AND SEE DETAIL 1.

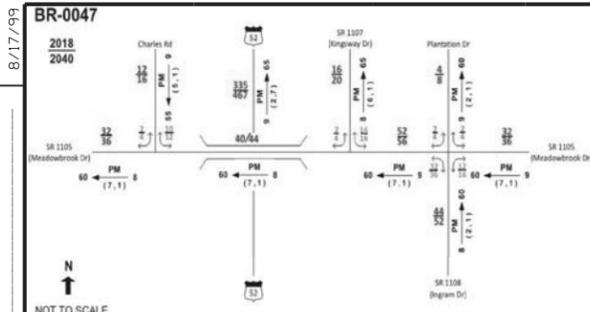


SHOULDER BERM GUTTER DETAIL NO.

SEE PLANS FOR LOCATION OF PROPOSED SHOULDER BERM GUTTER USE WITH -L- TYPICAL SECTION

| | |
|---|--------------------------|
| PROJECT REFERENCE NO. BR-0047 | SHEET NO. 2A-1 |
| ROADWAY DESIGN ENGINEER | PAVEMENT DESIGN ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |

6/17/2018 11:10 AM 6/17/2018 BR-0047_RDY_TYP.dgn



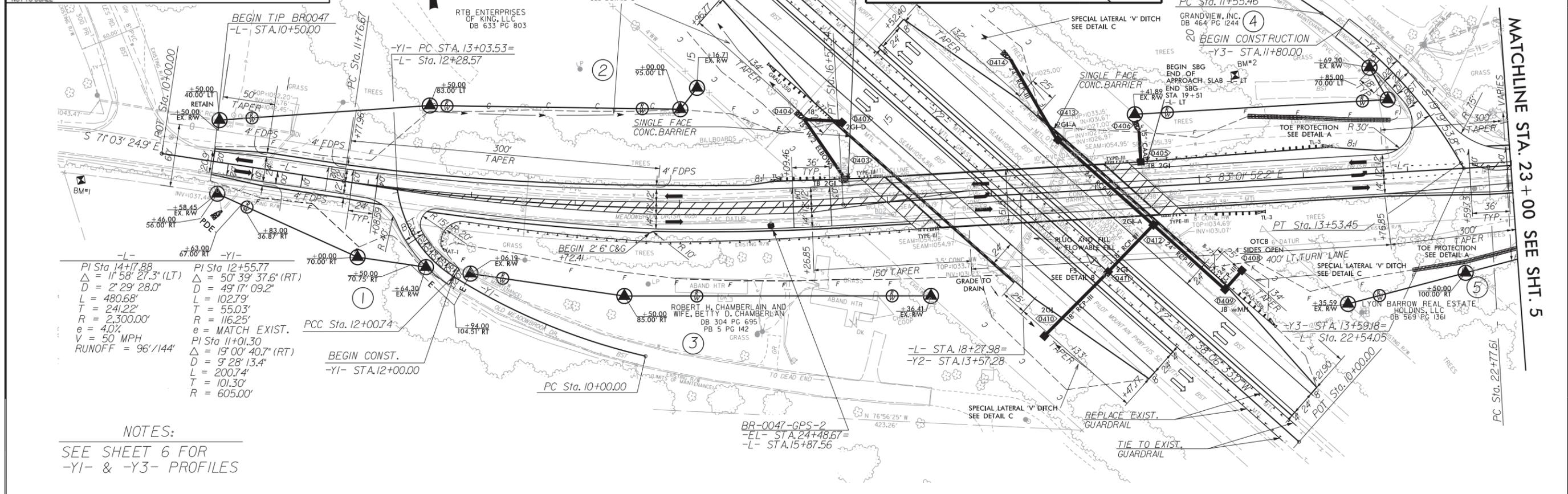
**DOCUMENT NOT CONSIDERED FINAL
UNLESS ALL SIGNATURES COMPLETED**

PROJECT REFERENCE NO. **BR0047** SHEET NO. **4**

R/W SHEET NO.

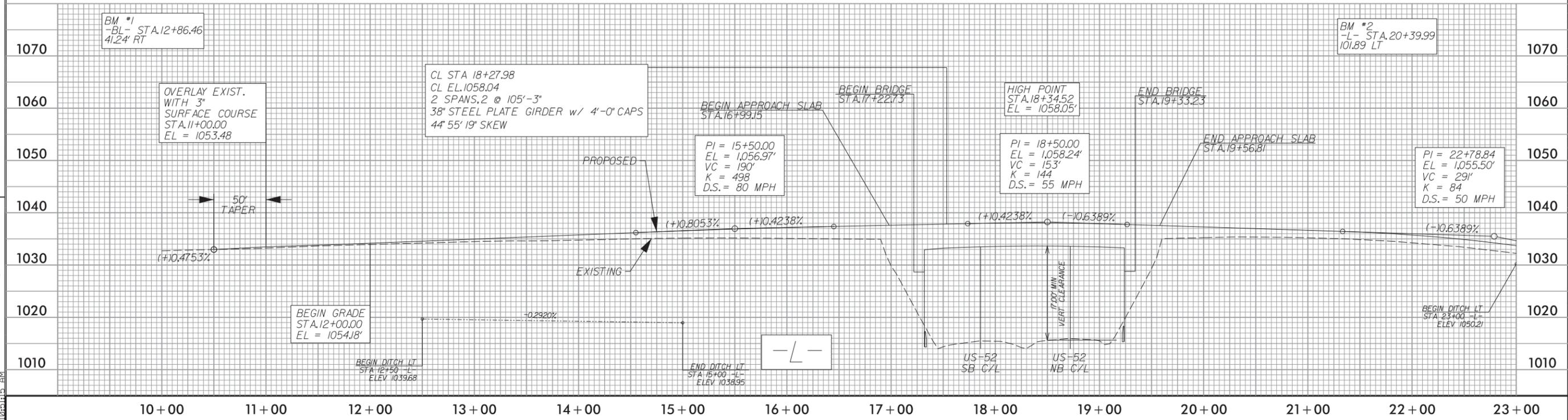
ROADWAY DESIGN ENGINEER HYDRAULICS ENGINEER

**INCOMPLETE PLANS
DO NOT USE FOR R/W ACQUISITION**



| | |
|-------------------------------|-------------------------------|
| -L- | -Y1- |
| PI Sta 14+17.88 | PI Sta 12+55.77 |
| $\Delta = 11' 58" 27.3" (LT)$ | $\Delta = 50' 39" 37.6" (RT)$ |
| $D = 2' 29" 28.0"$ | $D = 49' 17" 09.2"$ |
| $L = 480.68'$ | $L = 102.79'$ |
| $T = 241.22'$ | $T = 55.03'$ |
| $R = 2,300.00'$ | $R = 116.25'$ |
| $e = 4.0\%$ | $e = MATCH EXIST.$ |
| $V = 50 MPH$ | PI Sta 11+01.30 |
| $RUNOFF = 96'/144'$ | $\Delta = 19' 00" 40.7" (RT)$ |
| | $D = 9' 28" 13.4"$ |
| | $L = 200.74'$ |
| | $T = 101.30'$ |
| | $R = 605.00'$ |

NOTES:
SEE SHEET 6 FOR
-Y1- & -Y3- PROFILES



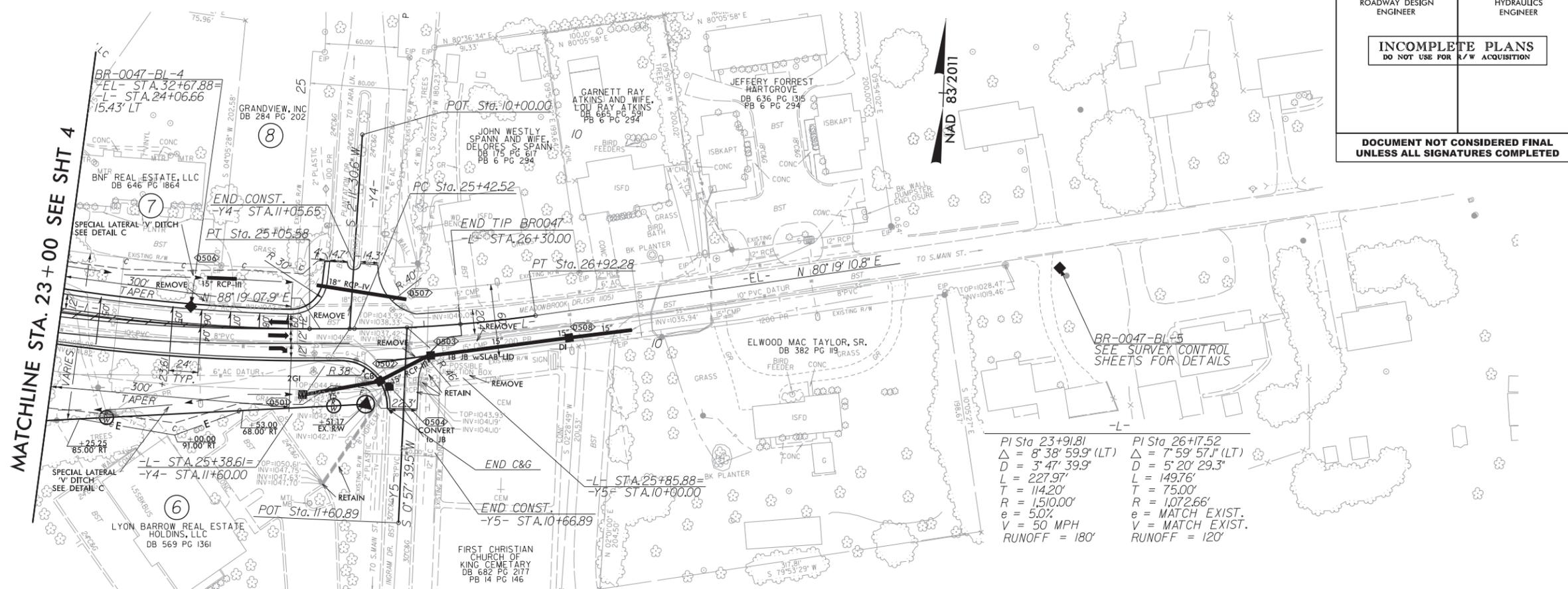
REVISIONS

MATCHLINE STA. 23 + 00 SEE SH. 5

5/31/2018 10:51:15 AM S:\31\2018\BR0047_RDY_PSH04.dgn

8/17/98

| | |
|---|---------------------|
| PROJECT REFERENCE NO. | SHEET NO. |
| BR-0047 | 5 |
| RW SHEET NO. | |
| ROADWAY DESIGN ENGINEER | HYDRAULICS ENGINEER |
| INCOMPLETE PLANS DO NOT USE FOR R/W ACQUISITION | |
| DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED | |



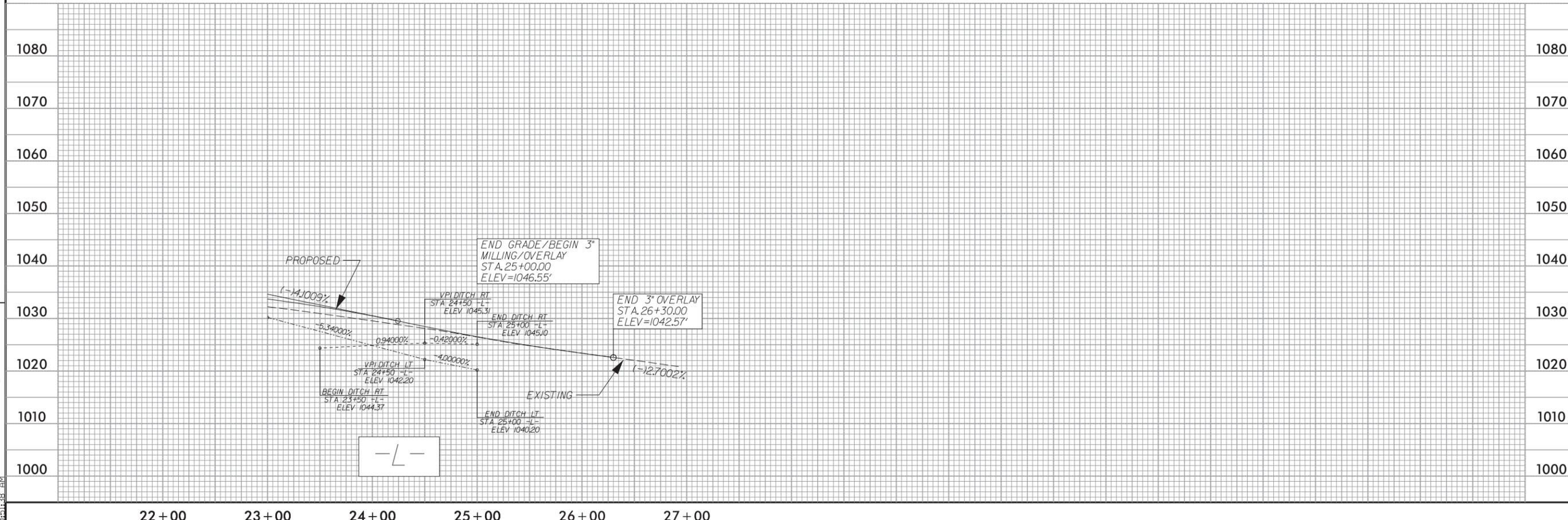
MATCHLINE STA. 23+00 SEE SHT 4

NAD 83/2011

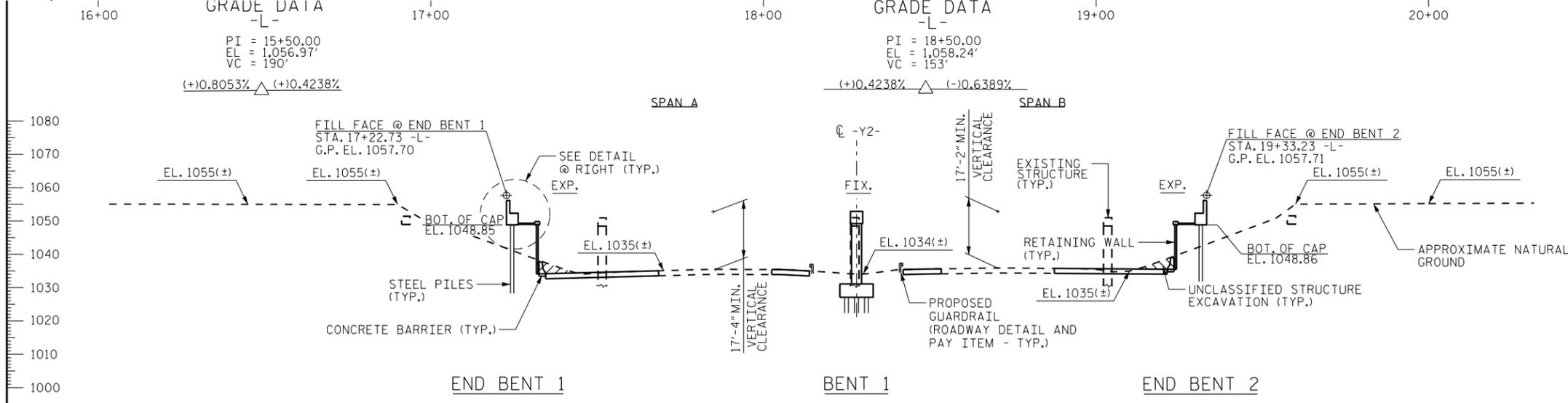
$PI\ Sta\ 23+91.81$
 $\Delta = 8' 38' 59.9'' (LT)$
 $D = 3' 47' 39.9''$
 $L = 227.97'$
 $T = 114.20'$
 $R = 1510.00'$
 $e = 5.0\%$
 $V = 50\ MPH$
 $RUNOFF = 180'$

$PI\ Sta\ 26+17.52$
 $\Delta = 7' 59' 57.1'' (LT)$
 $D = 5' 20' 29.3''$
 $L = 149.76'$
 $T = 75.00'$
 $R = 1,072.66'$
 $e = MATCH\ EXIST.$
 $V = MATCH\ EXIST.$
 $RUNOFF = 120'$

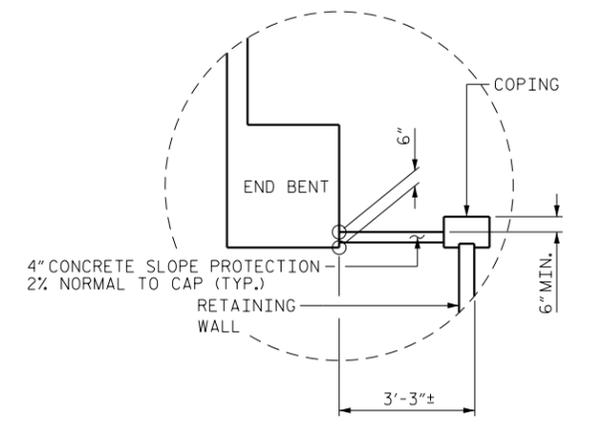
REVISIONS



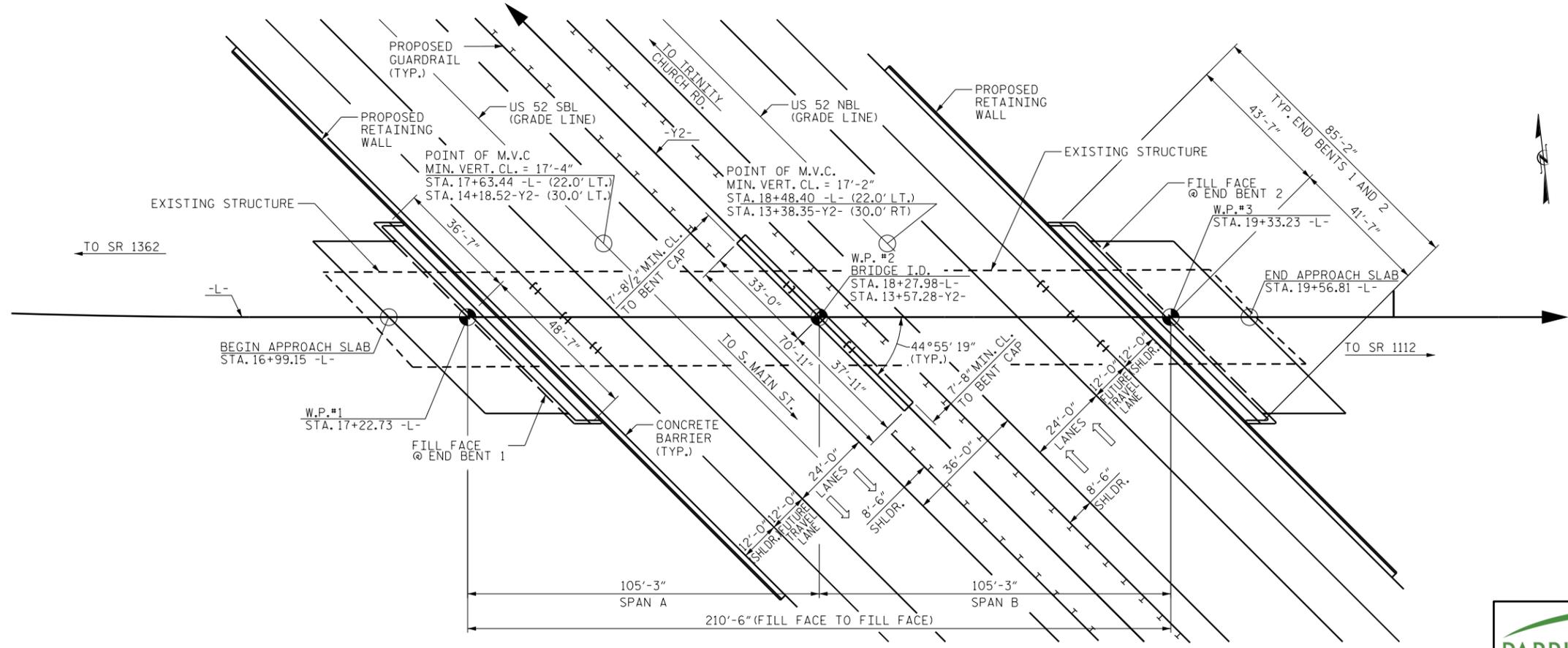
5/31/2018 5:31:16 PM S:\BR0047_PDX_PSH05.dgn



SECTION ALONG C SURVEY -L-
SECTIONS @ END BENTS AND BENT ARE AT RIGHT ANGLES



DETAIL A
END BENT 1 SHOWN,
END BENT 2 SIMILAR



PLAN

PILES NOT SHOWN FOR CLARITY



DOCUMENT NOT CONSIDERED
FINAL UNLESS ALL
SIGNATURES COMPLETED

PARRISH & PARTNERS
Parrish and Partners of North Carolina, PLLC
421 Fayetteville St., #1100
Raleigh, NC 27601
NC License #P-1212

PROJECT NO. BR-0047
STOKES COUNTY
STATION: STA. 18+27.98 -L-
STA. 13+57.28 -Y2-
SHEET 1 OF 4 REPLACES BRIDGE NO. 10

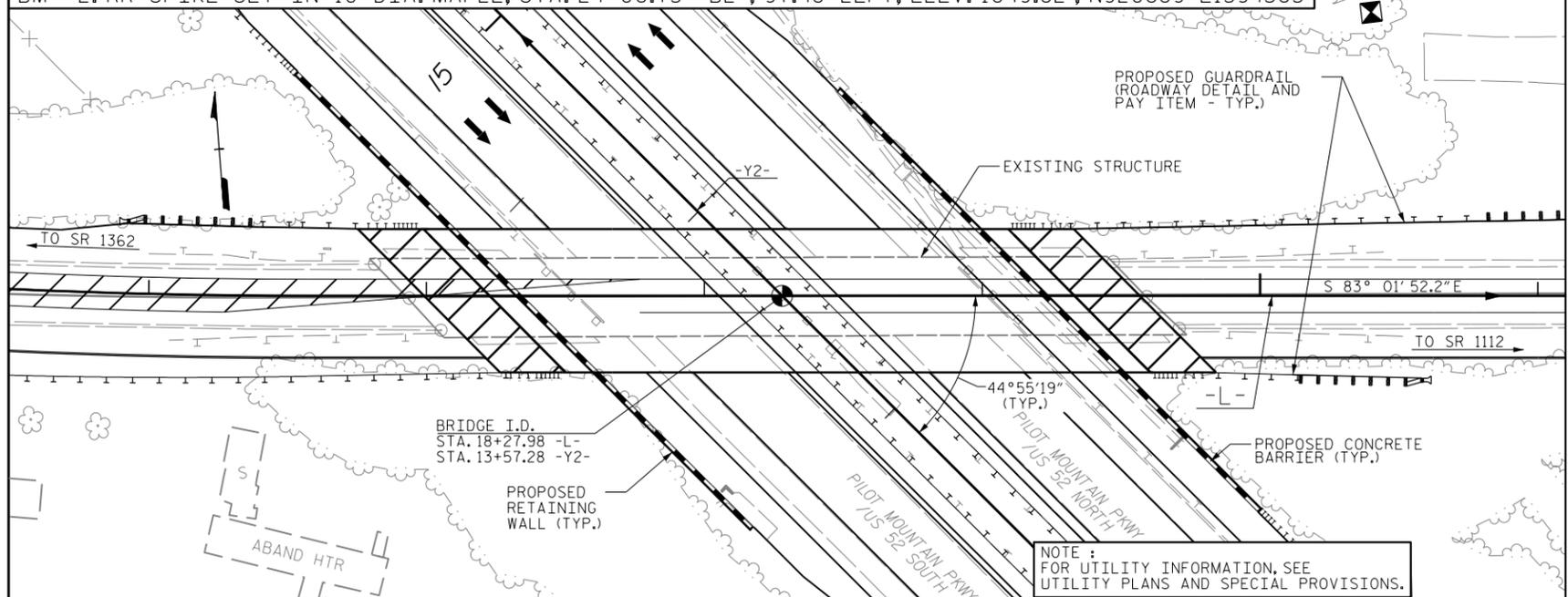
STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION
RALEIGH
**PRELIMINARY
GENERAL DRAWING**
FOR BRIDGE ON SR 1105
OVER U.S. 52 (PILOT MOUNTAIN PKWY.)
BETWEEN SR 1362
AND SR 1112

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-1 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 4 |

DRAWN BY : M.W. BREELAND DATE : 03-19
CHECKED BY : W.S. ARAFAT DATE : 05-19
DESIGN ENGINEER OF RECORD: O. PUIGCERVER DATE : 05-19

**PRELIMINARY PLANS
DO NOT USE FOR CONSTRUCTION**

D:\parrish\parrish\parrish\Documents\Surf\face Transportation\NC DOT BR_0047\Project Design\Structures\Drawings\PRELIMINARY\BR-0047 PRELIMIN GPE.dgn 1/23/2019 12:33:30 PM

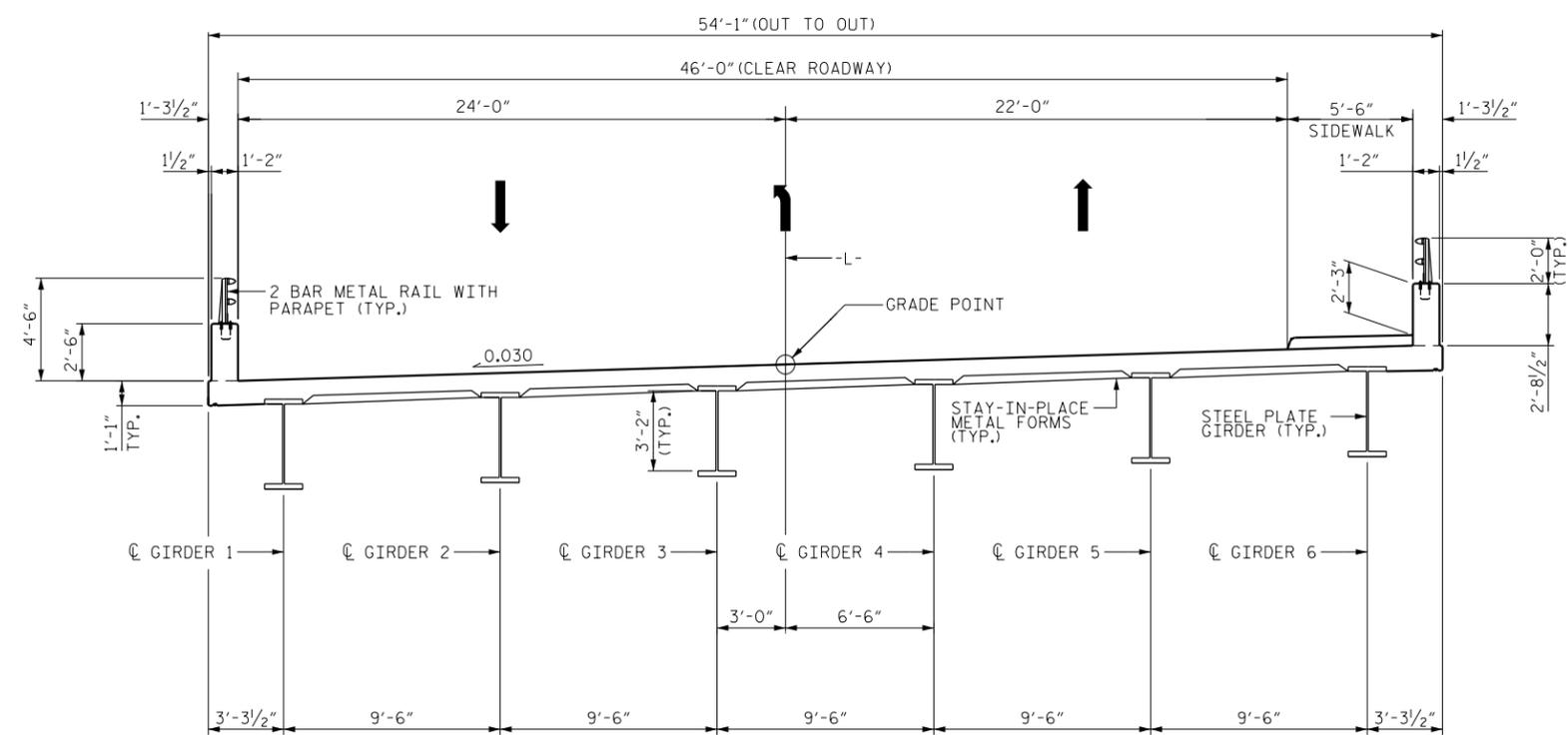


LOCATION SKETCH

NOTES

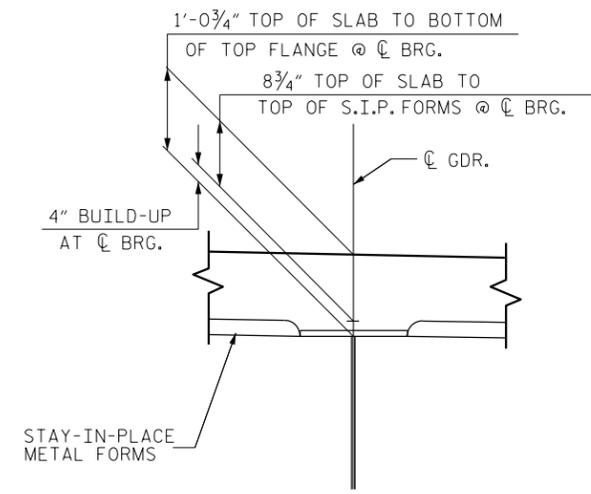
ASSUMED LIVE LOAD = HL-93 OR ALTERNATE LOADING.
 THIS BRIDGE HAS BEEN DESIGNED IN ACCORDANCE WITH THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS.
 THIS BRIDGE IS LOCATED IN SEISMIC ZONE 1.

NOTE:
 FOR UTILITY INFORMATION, SEE UTILITY PLANS AND SPECIAL PROVISIONS.



TYPICAL SECTION

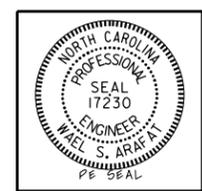
TWO SPAN CONTINUOUS PLATE GIRDERS WITH COMPOSITE DECK



DETAIL

(TYP. EACH GIRDER)

PROJECT NO. BR-0047
 STOKES COUNTY
 STATION: STA. 18+27.98 -L-
 STA. 13+57.28 -Y2-
 SHEET 2 OF 4 REPLACES BRIDGE NO. 10



DOCUMENT NOT CONSIDERED FINAL UNLESS ALL SIGNATURES COMPLETED

STATE OF NORTH CAROLINA
 DEPARTMENT OF TRANSPORTATION
 RALEIGH
 PRELIMINARY
 GENERAL DRAWING
 FOR BRIDGE ON SR 1105
 OVER U.S. 52 (PILOT MOUNTAIN PKWY.)
 BETWEEN SR 1362
 AND SR 1112

PARRISH & PARTNERS
 Parrish and Partners of North Carolina, PLLC
 421 Fayetteville St., #1100
 Raleigh, NC 27601
 NC License #P-1212

| REVISIONS | | | | | | SHEET NO. |
|-----------|-----|-------|-----|-----|-------|--------------|
| NO. | BY: | DATE: | NO. | BY: | DATE: | S-2 |
| 1 | | | 3 | | | TOTAL SHEETS |
| 2 | | | 4 | | | 4 |

| | | | |
|----------------------------|---------------|--------|-------|
| DRAWN BY : | M.W. BREELAND | DATE : | 03-19 |
| CHECKED BY : | W.S. ARAFAT | DATE : | 05-19 |
| DESIGN ENGINEER OF RECORD: | O. PUIGSERVER | DATE : | 05-19 |

PRELIMINARY PLANS
 DO NOT USE FOR CONSTRUCTION

P:\parrish-pw\benley.com\garrish-pw\Documents\Surface Transportation\NC DOT - BR-0047\Project Design\Structures\Drawings\PRELIMINARY\BR-0047 PRELIMIN TYP SEC LOC SKETCH.dgn
 6/13/2019 2:01:59 PM

APPENDIX B

Cultural Resources Correspondence

18-01-0007

Under Criteria Consideration D, a cemetery is eligible if it derives its primary significance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events. As previously noted, the cemetery does not contain burials of individuals of outstanding importance to the developmental history of the community. In addition, the cemetery, which dates to the mid-20th century, is not reflective upon a unique period in local history. It does not embody distinctive design values nor is the cemetery associated with historic events important to the history of the region. Therefore, based on field observations and research, it is our opinion that the King Community Church Cemetery is not eligible for listing in the NRHP.

Recommendations:

The intensive archaeological survey revealed an absence of topsoil throughout the majority of the APE. Most locations throughout the APE had subsoil exposed on the surface or just underneath the grass. No artifacts or cultural features were observed within the APE during the surface survey, and all shovel tests were negative (see Table 1 and Figures 36 and 37). Although two cemeteries are located within the APE, they are both relatively modern and ineligible for inclusion to the NRHP. Matthew Beazley, MA, RPA with ECA, recommends no further archaeological investigations for the proposed replacement of Bridge No. 10 in Stokes County. Mr. Beazley concludes that the proposed improvements will not impact any significant archaeological resources. No additional work is currently recommended for the replacement of Bridge 10 over US 52 in Stokes County.

The North Carolina Department of Transportation (NCDOT) Archaeology Group reviewed the subject project and determined:

- There are no National Register listed or eligible ARCHAEOLOGICAL SITES present within the project's area of potential effects. (Attach any notes or documents as needed)
- No subsurface archaeological investigations were required for this project.
- Subsurface investigations did not reveal the presence of any archaeological resources.
- Subsurface investigations did not reveal the presence of any archaeological resources considered eligible for the National Register.
- All identified archaeological sites located within the APE have been considered and all compliance for archaeological resources with Section 106 of the National Historic Preservation Act and GS 121-12(a) has been completed for this project.

Brief description of review activities, results of review, and conclusions:

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence

Signed:



January 14, 2019

NCDOT ARCHAEOLOGIST

Date

18-01-0007



ARCHAEOLOGICAL SURVEY REQUIRED FORM

This form only pertains to ARCHAEOLOGICAL RESOURCES for this project. It is not valid for Historic Architecture and Landscapes. You must consult separately with the Historic Architecture and Landscapes Group.



PROJECT INFORMATION

Project No: **BR-0047** County: **Stokes**
 WBS No: **67047.1.1** Document: **MCC**
 F.A. No: **na** Funding: State Federal
 Federal Permit Required? Yes No Permit Type: **NWP**

Project Description: The North Carolina Department of Transportation (NCDOT) Division 9 intends to replace Bridge No. 10 on SR 1105, Meadowbrook Drive, over US 52 in King. No preliminary designs were available at the time of the archaeological review but a proposed study area slightly over 1 mile (nearly 1.67 kilometers) long and 500 feet (approximately 152.4 meters) wide was submitted for the cultural resources review. This study area is considered to be the area of potential effects (APE) for the initial archaeological review and investigations. Thus, the APE is currently estimated to encompass 62.5 acres (slightly over 25.29 hectares).

SUMMARY OF ARCHAEOLOGICAL RESOURCES REVIEW: *SURVEY REQUIRED*

Brief description of review activities, results of review, and conclusions:

The initial review of the site maps and files archived at the North Carolina Office of State Archaeology (OSA) was conducted on February 13, 2018. No previously recorded archaeological resources are located within the proposed APE, but a few archaeological resources have been recorded in the vicinity. Site 31SK99 was recorded as an Early Archaic site (featuring a Palmer Corner-Notched projectile point) by students with Wake Forest University along the toe-slope overlooking an unnamed tributary of Crooked Run Creek to the southwest of the current APE. Additionally, two small prehistoric sites, including one with another Palmer Corner-Notched projectile point, were recorded by archaeologists from the Research Laboratories of Archaeology at the University of North Carolina at Chapel Hill, northwest of the current APE along the alluvial terrace of Crooked Run Creek (Ward 1980: 8). Neither of those sites was considered to be archaeologically significant.

An examination of the data presented on the North Carolina State Historic Preservation Office HPOWEB GIS Service (<http://gis.ncdcr.gov/hpoweb/>) reveals two recorded historic property locations within .5-mile of the proposed project: the Pullam-White House (SK0411) and the Schaub-Calloway House (SK0414). Just beyond this radius to the east lies the National Register of Historic Places-listed King Historic District (SK0840). Two cemeteries have been mapped within the current APE: the King Community Church Cemetery and the First Christian Church of King Cemetery. Neither of these cemeteries appear to have been recorded as archaeological resources or historic properties.

An examination of soils in Stokes County presented on the National Resources Conservation Service Web Soil Survey (<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>) indicates that the following soil types fall within the delineated APE: Clifford fine sandy loam, 2 to 8 percent slopes (CcB); Clifford sandy clay loam, 2 to 8 percent slopes, moderately eroded (CeB2); Codorus loam, 0 to 2 percent slopes, occasionally flooded (CsA); Fairview-Poplar Forest complex, 8 to 15 percent slopes, moderately eroded (FpC2); Fairview-Poplar Forest-Urban land complex, 2 to 8 percent slopes (FrB); and Fairview-Poplar Forest-Urban land

complex, 8 to 15 percent slopes (FrC).

The archaeological review APE for the proposed project is substantially large for a bridge replacement, encompassing more than 60 acres. While much of that land has been significantly altered by modern landscape development (residential, commercial, transportation, etc.), a few locations within the APE may retain some potential for archaeological resources. As mentioned earlier, two known cemeteries are located within the current APE. These two resources should be documented and the potential for unmarked burials in the vicinity should be assessed. A reconnaissance investigation of the proposed APE should be undertaken to record existing resources in the area and to assess the potential for subsurface archaeological deposits. Subsurface testing should be undertaken in any locations within the APE where it is deemed appropriate.

Referenced Cited:

Ward, T.

1980 *Archaeological Survey of Planned Additions to the King Sanitary District Wastewater Treatment Facilities.*
Ms. on file, Research Laboratories of Archaeology, University of North Carolina, Chapel Hill.

SUPPORT DOCUMENTATION

See attached: Map(s) Previous Survey Info Photos Correspondence
 Other: <http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

FINDING BY NCDOT ARCHAEOLOGIST – SURVEY REQUIRED



February 19, 2018

NCDOT ARCHAEOLOGIST

Date

TBD

Proposed fieldwork completion date

18-01-0007



HISTORIC ARCHITECTURE AND LANDSCAPES NO SURVEY REQUIRED FORM

This form only pertains to Historic Architecture and Landscapes for this project. It is not valid for Archaeological Resources. You must consult separately with the Archaeology Group.

PROJECT INFORMATION

| | | | |
|--|---|------------------------|--|
| Project No.: | BR-0047 | County: | Stokes |
| WBS No.: | 67047.3.1 | Document Type: | MCC |
| Fed. Aid No.: | N/A | Funding: | <input checked="" type="checkbox"/> State <input type="checkbox"/> Federal |
| Federal Permit(s): | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No | Permit Type(s): | USACE |
| Project Description: Replace Bridge No. 840010 on SR 1105 (Meadowbrook Drive) over US 52. | | | |

SUMMARY OF HISTORIC ARCHITECTURE AND LANDSCAPES REVIEW

Description of review activities, results, and conclusions:

Review of HPO quad maps, HPO GIS information, historic designations roster, and indexes was undertaken on January 24, 2018. Based on this review, there are no existing NR, SL, LD, DE, or SS properties in the Area of Potential Effects, which is defined on the following maps and follows the study area boundary. The properties within the APE consist of mid- to late 20th century houses and commercial structures; a visual inspection through Google Street View and aerial imagery show that all are unremarkable and/or altered and not eligible for National Register listing. Bridge No. 10 is not eligible for NR listing based on the NCDOT Historic Bridge Inventory. There are no National Register listed or eligible properties and no survey is required. If design plans change, additional review will be required.

Why the available information provides a reliable basis for reasonably predicting that there are no unidentified significant historic architectural or landscape resources in the project area:

HPO quad maps and GIS information recording NR, SL, LD, DE, and SS properties for the Edgecombe County survey, Edgecombe County GIS/Tax information, and Google Maps are considered valid for the purposes of determining the likelihood of historic resources being present. There are no National Register listed or eligible properties within the APE and no survey is required.

SUPPORT DOCUMENTATION

Map(s) Previous Survey Info. Photos Correspondence Design Plans

FINDING BY NCDOT ARCHITECTURAL HISTORIAN

Historic Architecture and Landscapes -- NO SURVEY REQUIRED

Kate Auebal

1/24/2018

NCDOT Architectural Historian

Date